**Version 1 Review**

**Project Overview:**

The **Personalized Meal Planning and Nutrition Tracker** app is designed to help users plan meals based on their dietary preferences, nutritional needs, and health goals. The app generates personalized meal plans, tracks nutritional intake, and integrates with fitness trackers to provide holistic insights into user health. It is developed using Python, Flask for the front end, and the Edamam API for recipes.

**Demonstration:**

1. **Users input dietary preferences** and health goals into the app.
2. The app **generates meal plans** using the Edamam API and stores the data in CSV format.
3. A **nutrition summary** of total and average calories is displayed to the user.
4. The UI is built using **Flask templates**, with basic navigation and form submission.

**Issues Encountered:**

1. **API Rate Limits**: The Edamam API imposes rate limits, which caused issues when trying to generate meal plans for multiple users.
   * **Solution**: Implemented batching and caching techniques to reduce the number of API calls and avoid hitting the rate limit.
2. **Data Persistence**: Initially, the app used CSV files for data storage, but this approach was limiting.
   * **Solution**: Migrating to an SQLite database is planned for future updates, which will provide better data persistence and performance.

**Milestones for Version 2:**

1. **Fitness Tracker Integration**:
   * Integrate the Fitbit API to track users' activity levels and sync this data with the nutrition tracker.
2. **Database Migration**:
   * Transition from CSV file storage to an SQL database (SQLite) for better scalability and data management.
3. **Nutrition Insights**:
   * Provide more detailed nutritional insights, such as tracking macros (protein, fat, carbs) and displaying trends over time.
4. **UI Improvements**:
   * Add interactive elements, form validation, and better user experience design for easier navigation and usage.

**Self-Reflection:**

Progress has been satisfactory, with the core functionality for meal planning and nutrition tracking in place. API integration proved to be more challenging than expected, particularly with the rate limits, but this has been partially mitigated through caching techniques. Data storage using CSV files is not scalable, and migration to an SQL database is a priority for the next phase.

Overall, the project is on track, but focusing on resolving current limitations will be key to success in the next phase.